



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/718,896	11/22/2000	Joachim Boretzky	GR 98 P 3363	2982

7590 01/15/2004

Lerner and Greenberg, P.A.
P.O. Box 2480
Hollywood, FL 33022-2480

EXAMINER

WACHTEL, ALEXIS A

ART UNIT	PAPER NUMBER
----------	--------------

1764

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/718,896

Applicant(s)

BORETZKY ET AL.

Examiner

Alexis Wachtel

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/22/00.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,5,6,7 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,077,847 to Choi et al in view of US 4,878,440 to Tratz et al and US 4,178,232 to Nollet.

Claims 6 and 7 are given no patentable weight as they do not add structural limitations to the claimed apparatus nor do said claims assist in differentiating the claimed apparatus over the prior art.

Choi et al disclose a solid waste disposal plant that includes a shredder (121) that breaks down refuse to a processable particle size of 3 to 4 inches. A magnetic separator (127) is located downstream from the shredder and separates out ferrous metal from the refuse. An air separator having a zigzag shaped duct (Fig.1, item 146) is located downstream from the shredder. The air separator having a zigzag shaped duct classifies essentially ferrous metals free refuse into organic and inorganic fractions. Organics are ejected out of the air separator's upper outlet and inorganics are ejected out of the air separator's lower outlet (Col 5, lines 55-61). The organic fraction is then subjected to a drying operation (Col 3, lines 3-4). A dryer (204) is used to dry the organic fraction. For the predominately inorganic fraction there is provided a means to

Art Unit: 1764

separate particle by particle size differential, typically a trommel mill. This forms the glass-rich fraction and non-ferrous metals fraction (Col 2, lines 53-56).

Choi et al fail to teach the use of a coarse screen located upstream from the air separator having a zigzag shaped duct. Tratz et al teach a waste disposal system that uses a residue sorting device in the form of a sieve to divide waste residue into a fine, finer coarse and coarser coarse material (Col 7, lines 61-67). Since the solid waste disposal plant disclosed by Choi et al functions by progressive classification of refuse material of a specific size optimized for processing by associated plant components, it would have been obvious to one of ordinary skill to have placed such a sieve immediately after the shredder of Choi et al's disclosure as a means to ensure that particles greater than 3-4 inches are not fed through the solid waste disposal plant which could damage waste disposal plant components. Particle sizes that are larger than 3-4 inches can then be fed again through the shredder.

Choi et al as set forth above fail to teach the use of an air drum separator connected to the lower outlet of the air separator having a zigzag shaped duct.

Nollet teaches that air drum separators can be used to separate components of different weights (Col 3, lines 31-43). Since a trommel mill and air drum separator both function to separate materials into different fractions, it would have been obvious to one of ordinary skill to have employed an air drum separator instead of a trommel mill since an air drum separator is equally suited for the task and choosing between two different pieces of hardware that accomplish the same task is only considered to be routine in the art.

Art Unit: 1764

Per claim 5: including a separating device for separating the heavy residue into an inert fraction and into at least one metal fraction, said separating device disposed downstream of said air separator drum. (Choi et al, Col 8, lines 36-60)

3. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,077,847 to Choi et al in view of US4,878,440 to Tratz et al and US 5,321,898 to Robinette, Jr. et al.

Choi et al fail to teach the use of a centrifugal screen connected to said upper outlet of said air separator having a zigzag shaped duct, said centrifugal screen having a housing, a rotor disposed in said housing, and a screen disposed between said rotor and said housing. Robinette, Jr. et al teach the use of a centrifugal screen dryer for drying waste materials (Col 1, lines 14-17). The centrifugal screen dryer includes a housing (24) a rotor (18), and a screen disposed between the rotor and housing (42). The rotor includes battens fastened to it (17). Examiner notes that the battens can function as a grinding and balling zone.

Since Choi et al discloses that the organic fraction is to be dried before further processing, it would have been obvious to one of ordinary skill to have used the centrifugal screen disclosed by Robinette Jr. et al instead of the means disclosed by Choi et al since the Robinette Jr et al's screen is functionally equivalent.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Alex Wachtel, whose number is (703)-306-0320. The Examiner can normally be reached Mondays-Fridays from 10:30am to 6:30pm.

If attempts to reach the Examiner by telephone are unsuccessful and the matter is urgent, the Examiner's supervisor, Mr. Glenn Caldarola can be reached at (703) 308-6824. The fax phone numbers for the organization where this application or proceeding

Art Unit: 1764

is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Glenn Caldarola
Supervisory Patent Examiner
Technology Center 1700